

Software Guide Compaq Notebook Computers

Document Part Number: 285558-001

June 2002

This guide provides instructions for using optical drive software to play, create, and copy to and from CDs and DVDs. Information about power and security settings and updating software is also provided. In addition, this guide explains how to use the MultiBoot, Intelligent Manageability, Compaq Diagnostics, and Computer Setup utilities to set preferences and to help detect, solve, and prevent problems. © 2002 Compaq Information Technologies Group, L.P.

Compaq, the Compaq logo, Evo, Presario, RomPaq, and SoftPaq are trademarks of Compaq Information Technologies Group, L.P. in the U.S. and/or other countries. Microsoft and Windows are trademarks of Microsoft Corporation in the U.S. and/or other countries. Intel, Pentium, and SpeedStep are trademarks of Intel Corporation in the U.S. and/or other countries. All other product names mentioned herein may be trademarks of their respective companies.

Compaq shall not be liable for technical or editorial errors or omissions contained herein. The information is provided "as is" without warranty of any kind and is subject to change without notice. The warranties for Compaq products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty.

Software Guide First Edition June 2002 Reference Number: N1000/1500 Document Part Number: 285558-001

Contents

1 CD and DVD Software

Using CDs and DVDs	1–1
Avoiding Standby and Hibernation	1–1
Displaying Media Contents	
Copyright Warning	
Playing CDs with Windows Media Player.	
	1–4
Playing a Video CD.	1–5
Using Notebook Media Keys	1–6
	1–7
Playing DVDs with WinDVD	1–8
	1–8
	1–9
Starting a DVD 1	-10
Using DVD Region Settings 1-	-10
Creating and Copying CDs and DVDs 1-	-12
Using Optional or Windows Software 1	-12
Understanding Easy CD Creator Features 1-	-12
Installing Easy CD Creator 1	-13
Installing Easy CD Creator Software 1-	-13
Enabling Auto Insert Notification 1-	-14
Preparing to Use Easy CD Creator 1-	-15
Selecting Drive Locations 1	-15
Selecting and Preparing Easy CD Creator Media 1	-16
	-17
Accessing Easy CD Creator Help 1	-19
Easy CD Creator Tips and Troubleshooting 1	-20
	-20
Using CD Copier 1	-20
e ș	-20
Using Windows Media Player 1	
Responding to Buffer Underrun Errors 1	-21

2 Power

Selecting a Power Source 2–1
Understanding Standby and Hibernation 2–2
Standby 2–2
Hibernation
Choosing Standby, Hibernation or Shutdown 2–3
When You Leave Your Work 2–3
When the Power Supply Is Uncertain
While Using Drive Media 2–4
While Using Infrared 2–4
Standby, Hibernation and Shutdown Procedures 2–5
Identifying the Power Controls and Light 2–5
Using the Default Power Procedures
Setting Power Procedure Preferences
Using Emergency Shutdown Procedures 2–10
Setting Power Management Preferences 2–11
Accessing the Power Options Window 2–11
Displaying the Power Meter Icon 2–11
Setting or Changing a Power Scheme
Using SpeedStep (Windows 2000 Professional Only) 2-13
Choosing a Performance Mode 2–13
Setting SpeedStep Preferences 2–14
Finding More Battery Power Information 2–16

3 Security

4 Intelligent Manageability

Understanding Intelligent Manageability	4–1
Installing Intelligent Manageability	4-2
Setting Up Insight Management Agents	4-2
Using Fault Management Alerts	4-2
Identifying a Fault Management Alert	4-2
Setting Fault Management Alert Preferences	4-3

5 MultiBoot (Advanced Users Only)

Changing the Startup Sequence with MultiBoot	5–1
Enabling Media and Devices for MultiBoot	5-2
Using the Default Search Sequence	5–3
Planning Changes to the Startup Sequence	5–4
Specifying MultiBoot Preferences	5–5
Setting a Continuing Startup Sequence	5–5
Setting the MultiBoot Express Prompt	5–6
Responding to the MultiBoot Express Prompt	5–6

6 Software Updates and Restorations

Updating Software	6–1
Preparing for a Software Update	6–2
Accessing Notebook Model Information	6–2
Accessing ROM Version Information	6–2
Accessing Software Updates	6–4

Updating Software from the Internet	5–5
Downloading and Installing a System ROM Update 6	5–5
Downloading and Installing a KBC ROM Update 6	5–7
Downloading and Installing a Non-ROM SoftPaq 6	5–9
Restoring Software	-10
Installing a Retail Version of an Operating System 6-	-11

7 Setup and Diagnostic Utilities

Ś	Selecting Computer Setup or Compaq Diagnostics	7 - 1
1	Using Computer Setup	7–2
	Computer Setup Procedures	7–2
	Restoring Computer Setup Defaults	7–3
	Selecting from the File Menu	7–4
	Selecting from the Security Menu	7–5
	Selecting from the Tools Menu	7–6
	Selecting from the Advanced Menu	7–6
1	Using Compaq Diagnostics	7-8
	Detecting Compaq Diagnostics	7–8
	Installing Compaq Diagnostics	7–9
	Using the Compaq Configuration Record Scan 7	7–10
	Using the Diagnostics Scan	7–10

Index

1

CD and DVD Software

Using CDs and DVDs

Most of this section provides instructions for using optical drive software. Before using any optical drive software, Compaq recommends that you read the following general information about using CDs and DVDs.

Avoiding Standby and Hibernation

CAUTION: To prevent possible video and audio degradation and loss of audio or video playback functionality, do not initiate Standby or Hibernation while using drive media.

If Standby or Hibernation is accidentally initiated while a drive medium is in use:

- 1. Briefly press the power button to exit Standby or Hibernation.
- 2. Restart the notebook.
- 3. For more information about Standby and Hibernation, see Chapter 2, "Power."

Displaying Media Contents

Autorun, sometimes called *autoplay* or *auto insert notification*, is a feature of the operating system. Autorun displays the contents of a drive medium on the screen whenever you insert the medium into a drive (and close the tray, if you are using an optical drive). A drive medium is any storage device that can be inserted into a drive; for example, a diskette, disk, CD, or DVD.

Autorun is enabled at the factory, but can be disabled.

Setting Autorun Preferences

Autorun is enabled or disabled through the operating system:

■ In Windows 2000 Professional,

- 1. Double-click the My Computer icon on the Desktop.
- 2. Select the Tools menu > Folder Options > File Types tab.
- 3. Scroll through the list of items in the Registered File Types list, then select a file type, for example, Audio CD.
- 4. Select the Advanced button.
 - □ If Play is displayed in boldface type (**Play**), autorun is enabled on the drive. If Play is displayed in plain type (Play), autorun is disabled.
 - □ To change the autorun setting, select Play or **Play**, then select the Set Default button.
- 5. Select the OK button.
- In Windows XP Home or Windows XP Professional, double-click the My Computer icon on the Desktop, right-click a drive, select Properties > AutoPlay tab, then follow the instructions on the screen.

Cancelling Autorun on an Audio CD

To prevent an audio CD from opening when autorun is enabled, press the **shift** key as you insert the CD.

Displaying the Contents of a Medium

If autorun is disabled and the contents of a medium are not displayed when you insert it, you can display the contents manually:

1. Select Start > Run, then type:

explorer x:

(where X = the drive designation of the drive containing the medium).

2. Press enter.



A drive designation is a letter of the alphabet that the notebook uses to identify the drive. To display the drive designation of every drive in the system, double-click the My Computer icon on the desktop.

Copyright Warning

It is a criminal offense, under applicable copyright laws, to make unauthorized copies of copyright-protected material, including computer programs, films, broadcasts, and sound recordings. This notebook should not be used for such purposes.

Playing CDs with Windows Media Player

Instructions for playing CDs begin with inserting a CD into the drive. For insertion instructions, see the *Hardware Guide*, "Drives" chapter, on this CD.

Playing an Audio CD

To play an audio CD:

- 1. Read the "Using CDs and DVDs" section of this chapter.
- 2. Insert the audio CD into the drive, then close the tray. Wait several seconds. Then:
 - □ If autorun is enabled, Windows Media Player opens. Proceed to step 4.
 - □ If Windows Media Player does not open, proceed to step 3.
- 3. Open Windows Media Player from the Start button:
 - □ In Windows 2000 Professional, select Start > Programs > Windows Media Player.
 - □ In Windows XP Home or Windows XP Professional, select Start > All Programs > Windows Media Player.
- 4. Select the Play button to play the CD and the Stop button to stop the CD.

Playing a Video CD

- 1. Read the "Using CDs and DVDs" section of this chapter.
- 2. Insert the video CD into the drive, then close the tray. Wait several seconds. Then:
 - □ If autorun is enabled, Windows Media Player opens and the CD starts playing. Proceed to step 9.
 - □ If the CD does not play, and Windows Media Player does not open, proceed to step 3.
- 3. Open Windows Media Player from the Start button:
 - □ In Windows 2000 Professional, select Start > Programs > Windows Media Player.
 - □ In Windows XP Home or Windows XP Professional, select Start > All Programs > Windows Media Player.
- 4. On the Windows Media Player menu bar, select File > Open.
- 5. In the Browse or Look In field, double-click the drive designation of the drive containing the CD.

A drive designation is a letter of the alphabet that the notebook uses to identify the drive. To display the drive designation of every drive in the system, double-click the My Computer icon on the desktop.

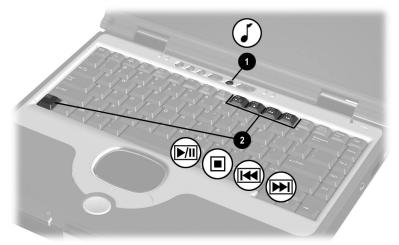
- 6. Select the folder containing the video file you want to play.
- 7. Select the video file, then select the Open button to play it.
- 8. To stop playing the video CD, select the Stop button.

Using Notebook Media Keys

Many tasks that can be performed through the operating system or in the Windows Media Player window can also be performed from your keyboard. The following procedures use the Digital Audio button **①** and the **Fn+F9** through **Fn+F12** hotkeys **②**.

- To open Windows Media Player, press the Digital Audio Easy Access button ①.
- To play, pause, or resume an audio CD, press the **Fn+F9** hotkeys.
- To stop an audio CD, press the **Fn+F10** hotkeys.
- To play the previous track of an audio CD, press the Fn+F11 hotkeys.
- To play the next track of an audio CD, press the **Fn+F12** hotkeys.

For more information about using Easy Access keys or hotkeys, see the *Hardware Guide*, "Pointing Devices and Keyboard" chapter on this CD.



Identifying the Digital Audio Easy Access button, the Fn key, and the F9 through F12 function keys

Accessing Windows Media Player Help

The Windows Media Player application is a program within the operating system. Instructions for using Windows Media Player are included in the Windows Media Player Help file.

To access the Help file, open the Windows Media Player window, then select Help on the menu bar.

To open Windows Media Player, use any one of the following methods:

- Insert a CD into the optical drive, then close the tray.
- Press the Digital Audio Easy Access button.
- Select the Windows Media Player icon on the taskbar.

or

- Select the Start button, then:
 - □ In Windows 2000 Professional, select Programs > Windows Media Player.
 - □ In Windows XP Home or Windows XP Professional, select All Programs > Windows Media Player.

Playing DVDs with WinDVD

InterVideo WinDVD is an application that enables you to play DVD movies. WinDVD is preloaded on the notebook, but not preinstalled.

Installing WinDVD

Although WinDVD can be installed by following the prompts that appear on the screen the first time you insert a DVD, Compaq recommends that you install WinDVD from the Setup Compaq Software icon before inserting a DVD.

Some DVDs contain third-party DVD player programs such as PCFriendly. If you insert a DVD that contains a third-party player program *before you have installed WinDVD*, you are prompted to install that third-party player program and not WinDVD. If you prefer to install WinDVD, decline the third-party player installation, usually by pressing a No, Cancel, or Exit button, then close the installation window.

To install WinDVD from the Setup Compaq Software icon:

- In Windows XP Professional, select Start > Setup Compaq Software icon. Select InterVideo WinDVD > Next button, then follow the instructions on the screen.
- In Windows 2000 Professional and Windows XP Home,
 - □ If the Setup Compaq Software icon is on the desktop, select the icon > InterVideo WinDVD > Next button, then follow the instructions on the screen.

- □ If the Setup Compaq Software icon is not found on the Desktop, select Start > Run. Then:
 - In Windows 2000 Professional, on the command line, type:

c:\cpqapps\setup.exe preload /s

The Setup Compaq Software icon is displayed on the Desktop. Select the icon > InterVideo WinDVD > Next button, then follow the instructions on the screen.

• In Windows XP Home, on the command line, type:

c:\cpqapps\setup.exe preload programs /s

The Setup Compaq Software icon is displayed in the All Programs menu. To access the Setup icon, select Start > All Programs. To install WinDVD, select the icon > InterVideo WinDVD > Next button, then follow the instructions on the screen.

Accessing WinDVD Help

Instructions for using WinDVD are included in the WinDVD Help file, in certain languages.

To access the Help file:

- 1. Open the WinDVD window by selecting the WinDVD Player icon on the taskbar. Or:
 - □ In Windows 2000 Professional, select Start > Programs > InterVideo > InterVideo WinDVD > WinDVD.
 - □ In Windows XP Home or Windows XP Professional, select Start > All Programs > InterVideo WinDVD > WinDVD.
- 2. Select the Help button. (The icon on the Help button is a question mark.)

Starting a DVD

In addition to the instructions in the WinDVD Player Help file, the following information may be helpful:

- For instructions for inserting a DVD into the drive, see the *Hardware Guide*, "Drives" chapter, on this CD.
- For general information about using DVDs, including important instructions for avoiding Standby and Hibernation while playing DVDs, see "Using CDs and DVDs" in this chapter.
- If your system includes an optional port replicator, dock or undock the notebook *before* starting a DVD (not *while* playing a DVD).
- For best playback quality, save your files and close all open applications before playing a DVD.
- After you insert a DVD, a short pause is normal before autorun opens the DVD and WinDVD Player.
- If the DVD displays a Playback Of Content From This Region Is Not Permitted error message, stop the DVD, change the region setting as described in the next section, then restart the DVD.

Using DVD Region Settings

Most DVDs that contain copyrighted files also contain region codes. The region codes help protect copyrights internationally.

You can play a DVD containing a region code only if the region code on the DVD matches the region setting on your DVD drive.

If the region code on a DVD does not match the region setting on your drive, a Playback Of Content From This Region Is Not Permitted message is displayed when you insert the DVD. To play the DVD, you must change the region setting on your DVD drive. **CAUTION:** The region setting on your DVD drive can be changed only 5 times.

- The region setting you select the fifth time becomes the permanent region setting on the drive.
- The number of allowable region changes remaining on the drive is displayed in the Remaining Times Until Permanent field in the WinDVD window. The number in the field includes the fifth and permanent change.

The procedure for changing the region setting on a drive begins with inserting a DVD into the drive. For insertion instructions, see the *Hardware Guide*, "Drives" chapter, on this CD.

To change the region setting on a drive:

- 1. Insert the DVD you want to play into the optical drive.
- 2. If the WinDVD window does not open after a short pause, select the WinDVD Player icon on the taskbar. Or:
 - □ In Windows 2000 Professional, select Start > Programs > InterVideo > InterVideo WinDVD > WinDVD.
 - □ In Windows XP Home or Windows XP Professional, select Start > All Programs > InterVideo WinDVD > WinDVD.
- 3. Select the Properties icon in the lower left corner of the window.
- 4. Select the General tab.
- 5. Select the radio button for a region.
- 6. Select the OK button.

Creating and Copying CDs and DVDs

This section provides procedures for creating or copying CDs or DVDs, depending on the optical drives on your PC, using Easy CD Creator (provided on selected models). If Easy CD Creator is included with your notebook, the Easy CD Creator software is provided on the *Easy CD Creator Basic* CD.

Using Optional or Windows Software

Easy CD Creator and similar software is available from most software retailers. To use the optical disc copying features within the operating system, refer to the operating system Help file. To access the Help file, select Start > Help.

Understanding Easy CD Creator Features

Easy CD Creator is a transfer utility that enables you to create or duplicate optical drive media.

Easy CD Creator includes 2 applications: DirectCD and Easy CD Creator. The Easy CD Creator application includes CD Copier.

- Use DirectCD with Windows Explorer to drag-and-drop data files between your hard drive and a medium or between your hard drive and a network drive. DirectCD is often used to back up data files or to share them with other people. Although it can be used with most application data files, including Microsoft Office data files, DirectCD cannot be used with audio files such as MP3 files.
- Use Easy CD Creator, which includes CD Copier, to copy either data files such as Microsoft Office files, or audio files such as MP3 files, to an optical drive medium.
 - Use Easy CD Creator to copy individual audio files to a medium, for example, to create a CD containing only your favorites.
 - **Use CD Copier to duplicate an optical drive medium.**

Installing Easy CD Creator

If Easy CD Creator software is included with the notebook, it is provided on a CD and is not preloaded or preinstalled.

The Easy CD Creator installation procedure begins with inserting a CD into the drive. For insertion instructions, see the *Hardware Guide*, "Drives" section.

Installing Easy CD Creator Software

CAUTION: To prevent file corruption and damage to components: Install the software from the drive in the notebook (not a drive in

an optional port replicator).
 Do not install the software while the notebook is running on battery power or when the external power supply is uncertain.

To install Easy CD Creator software from a CD:

- 1. Connect the notebook to reliable external AC power using the AC Adapter.
- 2. Save and close any open files or applications.
- 3. Insert the *Easy CD Creator Basic* CD into the optical drive, then close the tray. If autorun is enabled, an installation menu is displayed. If the installation menu does not display, select Start > Run. Then type:

x:\setup.exe

(where X is your optical drive designation)

A drive designation is a letter of the alphabet that the notebook uses to identify the drive. To display the drive designation of every drive in the system, double-click the My Computer icon on the desktop.

4. Select the OK button.

- 5. On the installation menu, Compaq recommends that you select the Complete installation. To do so, select the Complete button, then follow the instructions on the screen.
- 6. When installation is complete and you are prompted to restart the notebook, select Yes.

Enabling Auto Insert Notification

When the notebook restarts after the installation is complete, you may be prompted to enable Auto Insert Notification.

Auto Insert Notification is an operating system option that turns the autorun feature on or off. Autorun runs a program on a data medium or opens an audio or video medium as soon as the medium is inserted into the drive and the drive tray is closed.

You cannot use DirectCD unless Auto Insert Notification is enabled.

Compaq recommends that you enable Auto Insert Notification:

- 1. Select Yes at the Auto Insert Notification prompt.
- 2. Follow the instructions on the screen.
- 3. When the procedure displayed on the screen is complete, restart the notebook.

Auto Insert Notification is enabled when the notebook restarts.

Preparing to Use Easy CD Creator

CAUTIO medium	N: To prevent loss of work and damage to an optical drive
befo	nnect the notebook to a reliable external power source bre writing to a medium. Power loss, for example from a ng battery pack, could corrupt the write process.
(inc	ore writing to a medium, close all open applications luding screen savers and antivirus software) except Easy Creator Basic.
a netv	not copy directly from a medium to another medium or from etwork drive to a medium. Instead, copy from a medium or a work drive to your hard drive, then copy from your hard drive medium.
whil	not type on the notebook keyboard or move the notebook e the notebook is writing to a medium. The write process is sitive to vibration.

Selecting Drive Locations

If you plan to use an optional port replicator during a copy procedure:

- Insert the source drive (the drive that is to be copied *from*) into the port replicator.
- Do not copy directly from the source drive to the destination drive. Instead, copy from the source drive to your hard drive. Then copy from your hard drive to the destination drive.

If you plan to use a network drive during a copying procedure:

Do not copy directly between the network drive and the optical drive. Instead, copy from the network to your hard drive, then from your hard drive to the optical drive. Or, copy from the optical drive to your hard drive, then from your hard drive to the network drive.

Selecting and Preparing Easy CD Creator Media

Choosing Recording Media

Compaq recommends using high-quality media that correspond to the maximum speed of the optical drive.

The notebook can write or copy to the following types of recording media:

- CD-Rs, which provide one-time, non-erasable recording.
- CD-RWs, DVD-RAMs, and DVD/CD-RWs, which provide erasable recording. (DVD/CD-RWs are not yet available in all regions.)

Responding to the UDF Prompt

The first time you insert a medium such as a CD-RW, DVD-RAM, or DVD/CD-RW into an optical drive, you may be prompted to install Universal Disk Format (UDF) Reader.

When UDF Reader is installed, a medium created with DirectCD on your notebook can be used in another computer on which DirectCD is not installed.

Compaq recommends that you install UDF Reader.



Even if UDF Reader is installed on your notebook, a CD-R created with DirectCD software can be used in a compatible CD-ROM drive only if you select the Rearrange the Files option as you create the CD-R medium.

Formatting Recording Media

You can purchase optical drive media that either are or are not formatted for DirectCD.

- To use DirectCD, use a medium formatted for DirectCD.
- To use Easy CD Creator or CD Copier, do not use a medium formatted for DirectCD.

To erase DirectCD formatting from a rewritable medium so the medium can be used with Easy CD Creator or CD Copier:

- 1. Insert the medium into an optical drive. (If you are prompted to install UDF Reader, refer to the "Responding to the UDF Prompt" section.)
- 2. Access the Easy CD Creator Basic Eraser:
 - □ In Windows 2000 Professional, select Start > Programs > Easy CD Creator Basic > CD-RW Eraser.
 - □ In Windows XP Home or Windows XP Professional, select Start > All Programs > Easy CD Creator Basic > CD-RW Eraser.
- 3. Select the Erase button.
- 4. Select the OK button.

Selecting Easy CD Creator Settings

To use DirectCD, Easy CD Creator, or CD Copier, you must select the settings shown in the following table. These settings are compatible; for example, the settings for DirectCD do not conflict with the settings for CD Copier.

The Easy CD Creator software installs with all of these settings selected. Before beginning any copying procedure, you may want to confirm that these settings are selected.

Application	Required Settings
DirectCD	Enable Auto Insert Notification
Easy CD Creator	Disable Disk-at-Once and Enable Track-at-Once
CD Copier	Disable Disk-at-Once

Enabling Auto Insert Notification

Auto Insert Notification settings are selected through the operating system. To verify or change Auto Insert Notification settings, see "Displaying Media Contents" in this chapter.

Disabling Disk-at-Once

Disk-at-once settings are located in Easy CD Copier. To select them:

- 1. Access CD Copier:
 - □ In Windows 2000 Professional, select Start > Programs > Roxio Easy CD Creator 5 > Applications > CD Copier.
 - □ In Windows XP Home or XP Professional, select Start > All Programs > Roxio Easy CD Creator 5 > Applications > CD Copier.
- 2. Select the Advanced tab.
- 3. Clear the Disk-at-Once check box.
- 4. Select the Set as Default button.

Enabling Track-at-Once

Track-at-once settings are located in Easy CD Creator. To select them:

- 1. Access Easy CD Creator:
 - □ In Windows 2000 Professional, select Start > Programs > Roxio Easy CD Creator 5 > Applications > Track at Once.
 - □ In Windows XP Home or XP Professional, select Start > All Programs > Roxio Easy CD Creator 5 > Applications > Track at Once.
- 2. Select the Advanced tab > Create CD button.
- 3. Select the Track-at-Once check box.
- 4. Clear the Disk-at-Once check box.
- 5. Select the Set as Default button.

Accessing Easy CD Creator Help

To access the procedures for using DirectCD, Easy CD Creator, and CD Copier:

- In Windows 2000 Professional, select Start > Programs > Roxio Easy CD Creator 5 > Project Selector > Help radio button.
- In Windows XP Home or Windows XP Professional, select Start > All Programs > Roxio Easy CD Creator 5 > Project Selector > Help radio button.

Easy CD Creator Tips and Troubleshooting

Playing CDs and DVDs

Do not initiate Standby or Hibernation while playing any medium. For more information about this issue, see "Avoiding Standby and Hibernation" in this chapter. For general information about Standby and Hibernation, see Chapter 2, "Power."

Using CD Copier

When you use CD Copier to copy the contents of an entire medium to your hard drive, select the Copy button *immediately* after selecting the Copy to HDD First check box.

CAUTION: If there is a delay after you select the Copy to HDD First check box, the Easy CD Creator software may clear the Copy to HDD First check box and the medium may not be copied to the hard drive. Typical delays include opening or closing the drive tray, pausing to close an open application, or changing other settings in the Easy CD Creator software.

Creating Media for Use in Other Systems

A CD-R created with DirectCD can be read by a compatible CD-ROM drive only if you select the Rearrange the Files option as you create the CD-R.

A CD-RW, DVD-RAM, or DVD/CD-RW created with DirectCD can be read by a computer that does not have DirectCD installed only if you install UDF Reader on your notebook before creating the medium.

If you did not install UDF Reader at the UDF prompt the first time you inserted the medium into your notebook, reinsert the medium, then install UDF Reader at the UDF prompt.

Using Windows Media Player

If you are using Windows Media Player files to create a medium, you may not be able to drag-and-drop the files using Windows Explorer.

For more information about this issue, visit:

■ The Roxio Web site at http://www.roxio.com

or

■ The Microsoft Web site at http://www.microsoft.com

The language options at these Web sites vary and may be limited.

Responding to Buffer Underrun Errors

A buffer underrun error occurs when the flow of data to a drive or medium is interrupted. In all cases, a buffer underrun error stops the copying process. In some cases, a buffer underrun error may permanently damage an optical medium.

Buffer underrun errors are often caused by:

- Other applications, including screen savers and antivirus software, that are open during a copying process.
- A power interruption caused by a loose connection to AC power or by an electrical storm.
- An attempt to perform a copy procedure while running the notebook on a failing battery pack.
- An attempt to copy directly between media or between a medium and a network drive.

Occasionally, during a copying process that involves a network drive, a buffer underrun error may occur because the temporary files created during the process are being stored on the hard drive instead of the network drive. To change the location where these temporary files are stored, select Tools from the Easy CD Creator menu bar, select Options, then follow the instructions on the screen.

2

Power

Selecting a Power Source

The notebook can run on *internal* power from a charged battery pack or on *external* power. External power can be obtained from an electrical outlet (using the AC Adapter), from a vehicle cigarette lighter receptacle (using an optional Automobile Power Adapter/Charger) or from the in-seat power supply available on some commercial aircraft (using an optional Aircraft Power Adapter). Select a power source that supports the way you plan to use the notebook.

Task	Power Source
Work in most software applications.	 Charged battery pack in the notebook or External power supplied through one of the following devices: AC Adapter Optional port replicator Optional Aircraft Adapter Optional Automobile Power Adapter/Charger
Charge or calibrate a battery pack in the notebook.	 External power supplied through: AC Adapter Optional Automobile Power Adapter/Charger
Install or modify system software or Write to a CD.	External power supplied through the AC Adapter.

Understanding Standby and Hibernation

Standby and Hibernation are energy-saving features that conserve power and reduce startup time. They can be initiated by you or by the system.

Standby

Standby reduces power to system components that are not being used. When Standby is initiated, your work is saved in random access memory (RAM) and the screen is cleared. When you exit Standby, your work returns to the screen where you left off.

Hibernation

Hibernation saves your work in RAM to a hibernation file on the hard drive, then shuts down the notebook. When you exit Hibernation, your work returns to the screen where you left off.

If a power-on password is set, the password must be entered to exit Hibernation.

Hibernation is enabled at the factory, but can be disabled (usually, to save space on the hard drive). Disabling Hibernation is not recommended. When Hibernation is disabled, system-initiated Hibernation cannot save your work if the notebook reaches a critical low-battery condition while it is on or in Standby.

Enabling Hibernation

To verify that Hibernation is enabled:

- In Windows 2000 Professional, select Start > Settings > Control Panel. Double-click Power Options, select the Hibernate tab, then ensure that the Enable Hibernate Support check box is selected.
- In Windows XP Home or Windows XP Professional, select Start > Control Panel > Performance and Maintenance > Power Options icon. Select the Hibernate tab, then ensure that the Enable Hibernate Support check box is selected.

Choosing Standby, Hibernation or Shutdown

When You Leave Your Work

If you plan to resume shortly: Initiate Standby. Standby clears the screen, uses less power than leaving the notebook on, and your work returns instantly to the screen when you exit Standby. A fully charged new battery pack can support Standby for 2 days. A battery pack that has been frequently charged and discharged will support Standby for less time.

If you plan to resume within 2 weeks: Initiate Hibernation. Hibernation clears the screen, saves your work to the hard drive, and uses much less power than Standby. Returning to work saved in Hibernation takes longer than returning to work saved in Standby, but is faster than returning to your place manually after restarting the notebook. A fully charged battery pack supports Hibernation indefinitely.

If the notebook will be disconnected from external power for more than 2 weeks: Shut down the notebook and remove the battery pack. Removing the battery pack extends the useful life of the battery. Store the battery pack in a cool, dry place. For more battery pack storage information, see the *Hardware Guide*, "Storing a Battery Pack," on this CD.

When the Power Supply Is Uncertain

If power is interrupted while the notebook is in Standby, your unsaved work is lost. If power is interrupted while the notebook is in Hibernation, your unsaved work is protected.

Power may be interrupted if the notebook is running on external power from an unreliable source or on battery power from a failing battery pack. If you pause your work when the power supply is uncertain, Compaq recommends that you initiate Hibernation, shut down the notebook, or save your work, then initiate Standby.

While Using Drive Media

CAUTION: To prevent possible video and audio degradation and loss of audio or video playback functionality, do not initiate Standby or Hibernation while using drive media.

Do not initiate Standby or Hibernation while the notebook is accessing a drive medium. A drive medium is any storage device that can be inserted into a drive, for example, a diskette, disk, CD, or DVD.

The operating system normally prevents the system from going to Standby or Hibernation if data is being transferred. However, to avoid the possibility of losing critical data, do not initiate Standby or Hibernation while transferring files.

While Using Infrared

Do not initiate Standby or Hibernation while using infrared.

If the notebook is in Standby or Hibernation, an infrared transmission cannot be initiated. During an infrared transmission:

- If Standby is initiated, the transmission stops. The transmission resumes when the notebook exits Standby. To exit Standby, briefly press the power button.
- If Hibernation is initiated, the infrared transmission is terminated and the notebook shuts down. To restart the transmission, exit Hibernation by briefly pressing the power button, then start a new infrared transmission.

For more information about using infrared, see the *Hardware Guide*, "External Device Connections" chapter, on this CD.

Standby, Hibernation and Shutdown Procedures

Identifying the Power Controls and Light

The procedures for using Standby, Hibernation, and Shutdown use the power/Standby light ①, the power button ②, and the display switch ③.



Identifying the power/standby light, power button, and display switch

Using the Default Power Procedures

The following tables describe the default procedures for turning on or shutting down the notebook, initiating or exiting Standby or Hibernation, and for turning off the display. Some procedures can be changed. For instructions, see "Setting Power Procedure Preferences," which follows the tables.

Task Procedure Result Turn the Briefly press the power Power/standby notebook on. button. light turns on. Operating system loads. Shut down the Save your work and close Operating notebook.* all open applications. Then: system closes. In Windows 2000 Power/standby Professional. select light turns off. Start > Shut Down > Notebook turns Shut down, then select off. the OK button. In Windows XP Home or Windows XP Professional. select Start > Turn Off Computer > Turn Off. Turn off the Close the notebook. Closing the display when notebook activates the notebook the display switch, which turns off the is on. display. *If the system is unresponsive and you are unable to shut down the

Turning the Notebook On or Off

*If the system is unresponsive and you are unable to shut down the notebook with these procedures, see "Using Emergency Shutdown Procedures," later in this section.

Initiating or Exiting Standby

ask	Procedure	Result
Initiate Standby.	Press the Fn+F3 hotkeys.* or	Power/standby light blinks.
	In Windows 2000 Professional, select Start > Shut Down > Stand by, then select the OK button.	 Screen clears.
	In Windows XP Home or Windows XP Professional, select Start > Turn Off the Computer > Standby. (If the Standby option is not displayed, press the shift key.)	
Exit Standby.	Briefly press the power button.	 Power/standby light turns on.
		 Your work returns to the screen.
e F3 key. For mo	hotkeys, briefly press the Fn k re information about hotkeys, s evices and Keyboard" chapter,	ey, the

Initiating or Exiting Hibernation

Task	Procedure	Result
Initiate Hibernation.	If the notebook is on, briefly press the power button once. If the notebook is in Standby, briefly press the power button twice.* or In Windows 2000 Professional, select Start > Shut Down > Hibernate, then select the OK button. In Windows XP Home or Windows XP Professional, select Start > Turn Off the Computer > Hibernate. (If the Hibernate option is not displayed, press the shift key.)	 Power/standby light turns off. Screen clears.
Exit Hibernation.	Briefly press the power button.	 Power/standby light turns on. Your work returns to the screen.

information about changing the function of the power button, see the next section, "Setting Power Procedure Preferences."

Setting Power Procedure Preferences

You can change the functions of the power button, the **Fn+F3** hotkeys, and the display switch through the operating system.

Accessing Power Procedure Settings

To access power procedure settings:

- In Windows 2000 Professional, select Start > Settings > Control Panel. Double-click Power Options, then select the Advanced tab.
- In Windows XP Home or Windows XP Professional, select Start > Control Panel > Performance and Maintenance > Power Options icon > Advanced tab.

To learn more about power procedure settings or any other item in the Power Options window, select the question mark in the upper right corner of the window, then select the item.

As you read about the power procedure settings, the following information may be helpful.

Using Fn+F3 as the Windows Sleep Button

The **Fn+F3** hotkeys on the notebook are equivalent to the "sleep button" referred to in Windows. For example, if you set the Sleep Button field on the Power Options Advanced tab to Hibernate, pressing the **Fn+F3** hotkeys will initiate Hibernation.

Using a Standby Password

If you select the Prompt For Password When the Computer Goes Off Standby setting, respond to the Standby prompt with a Windows password, not a Compaq password.

For more information about using both Windows and Compaq passwords, see "Combining Compaq and Windows Passwords" in Chapter 3, "Security."

Using Emergency Shutdown Procedures

If the notebook is unresponsive and you are unable to use normal Windows shutdown procedures, try the following emergency procedures:

- Press ctrl+alt+delete. Then:
 - □ In Windows 2000 Professional, select the Shut Down button, press the down arrow for the What Do You Want the Computer To Do field until Restart or Shut Down is displayed, then select the OK button.
 - □ In Windows XP Home or Windows XP Professional, select the Turn Off Computer button, then select the OK button.
- If you are unable to shut down the notebook with **ctrl+alt+delete**, press and hold the power button for 4 seconds.
- If you are unable to shut down the notebook with the power button, remove the battery pack and disconnect the notebook from external power.

Setting Power Management Preferences

Accessing the Power Options Window

Power management preferences are set in the Windows Power Options window. To access the Power Options window:

- In Windows 2000 Professional, select Start > Settings > Control Panel, then double-click Power Options.
- In Windows XP Home or Windows XP Professional, select Start > Control Panel > Performance and Maintenance > Power Options icon.

The procedures for selecting Power Meter icon, Power Scheme, and screen brightness settings are provided on the next few pages.

To learn more about these settings or about any other item in the Power Options window, select the question mark in the upper right corner of the window, then select the item.

Displaying the Power Meter Icon

When the Power Meter icon is displayed on the taskbar, the icon changes shape to indicate whether the notebook is running on battery power or external AC power.

- When the notebook is running on battery power, select the icon to display battery charge information.
- At any time, double-click the icon to display the Power Options window.

To show or hide the Power Meter icon:

- 1. Access with Power Options window.
- 2. Select the Advanced tab.
- 3. Select or clear the Always Show Icon on the Task Bar check box.
- 4. Select the OK button.

Setting or Changing a Power Scheme

A Windows Power Scheme assigns power levels to system components. For example, you can set a Power Scheme that turns off the display after a time interval you specify.

Setting a Power Scheme

To set a Power Scheme:

- 1. Access the Power Options window.
- 2. Select the Power Schemes tab.
- 3. Select a Power Scheme from the Power Schemes list, then select the settings you want to use in the Settings list.
- 4. Press the OK button.

Changing a Power Scheme

To change a Power Scheme:

- 1. Access the Power Options window.
- 2. Select the Power Schemes tab.
- 3. Select a Power Scheme from the Power Schemes list.
- 4. Press the OK button.

Using SpeedStep (Windows 2000 Professional Only)

In Windows 2000 Professional, the Intel Pentium 4 Processor with SpeedStep technology enables you to set the processor speed for optimal performance or optimal power conservation. The SpeedStep technology can also enable an automatic change in CPU (central processing unit) speed when the power source changes between AC power and battery power or when notebook use changes between active and idle.

These changes in CPU speed function independently from the power management settings available through the operating system. For information about using Windows power management features, see "Setting Power Management Preferences" earlier in this chapter.

In Windows XP Home and Windows XP Professional, the functions of SpeedStep technology are managed through the operating system.

Choosing a Performance Mode

The SpeedStep technology offers 4 preset performance modes:

- In Maximum Performance mode, the processor runs at full speed to provide maximum performance.
- In Automatic mode, the processor speed increases while the notebook is being used and decreases when the notebook is not being used.
- In Battery Optimized mode, the processor runs at a reduced speed to provide an optimal balance between energy conservation and performance.
- In Maximum Battery mode, the processor runs at a greatly reduced speed to provide maximum energy conservation.

The notebook can run in any of the performance modes while it is operating on AC power or on battery power.

Setting SpeedStep Preferences

SpeedStep settings can be accessed from either the SpeedStep window or the SpeedStep icon. In addition, SpeedStep can be enabled or disabled in Computer Setup.

If the SpeedStep window and icon are not accessible, they may be disabled in Computer Setup. To enable the window and icon (and other settings in the SpeedStep window), see "Using Computer Setup" later in this section.

Using the SpeedStep Window

To open the SpeedStep window from the desktop, select Start > Settings > Control Panel > Power Management icon > Intel SpeedStep technology tab. Then set your preferences as instructed in the following table.

Preference	Procedures
Assign a performance mode that applies when the notebook is running on battery power.	Select a performance mode from the Running on Batteries list, then select OK.
Assign a performance mode that applies when the notebook is running on AC power.	Select a performance mode from the Plugged In list, then select OK.
Set the notebook to remain in the same performance mode even if the power source changes.	Select the same performance modes from the drop-down lists for Running on Batteries and Plugged In, then select OK.
Remove the SpeedStep icon from the taskbar.	 Select the check box for Remove Icon from Taskbar. Select OK in the Advanced window. Select OK or Apply in the main SpeedStep window.

Using the SpeedStep Icon

The SpeedStep icon displays on the taskbar by default and changes to indicate which SpeedStep mode is active. The icon can also be used for the tasks described in the following table.

Task	Procedure
Display current performance mode.	Rest the pointer over the icon.
Open the SpeedStep window.	Select the icon.
Change the current performance mode.	Right-click the icon, then select a performance mode with the up or down arrow key.

Using Computer Setup

The SpeedStep settings in Computer Setup enable or disable the SpeedStep settings in the operating system. Computer Setup is a non-Windows utility. For more information about using Computer Setup, see Chapter 7, "Setup and Diagnostic Utilities."

To access the SpeedStep settings in Computer Setup:

- Turn on or restart the notebook. Press F10 while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 2. Use the arrow keys to select Advanced > Device Options. In the Intel SpeedStep Technology field:
 - Select Automatic to enable all SpeedStep settings in the SpeedStep window.
 - Select Disable to set the notebook to run in Battery Optimized mode and disable all SpeedStep settings in the SpeedStep window.

3. To save your preferences, use the arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

Finding More Battery Power Information

For more information about using and storing battery packs and conserving battery pack power, see the *Hardware Guide*, "Battery Packs" chapter, on this CD.

3

Security

Security Features Quick Reference

The notebook provides the following security features that are not available in the operating system.

For information about operating system security features, select Start > Help > Contents tab, then select Security.

To Protect Against This Risk	Use This Security Feature
Unauthorized use of the notebook	Power-on password
Unauthorized access to the Computer Setup utility	Compaq administrator password
Unauthorized access to the contents of a hard drive	DriveLock
Unauthorized use of a drive, a port, or a wireless device in the MultiPort	Device disabling
Unauthorized access to the processor serial number and other system identification information	System information management
Unauthorized removal of the notebook	Security cable slot

Setting Preferences in Computer Setup

Most security preferences are set in Computer Setup. Because Computer Setup is a non-Windows utility, keystrokes (not notebook pointing devices) are used to navigate or select within the utility.

If you are unfamiliar with non-Windows utilities, Compaq recommends that you read "Using Computer Setup" in Chapter 7, "Setup and Diagnostic Utilities," before using the utility to set a security preference.



An external keyboard connected by USB can be used in Computer Setup only if USB legacy support is enabled. For more information about USB, see the *Hardware Guide*, "External Device Connections" section, on this CD.

Using Passwords

Forgetting Passwords

Most security features use passwords. Whenever you set a password, write down the password and store it in a secure location away from the notebook.

- If you forget your power-on or Compaq administrator password, you cannot start up the notebook or exit Hibernation until a Compaq authorized service provider resets the notebook. To contact a Compaq authorized service provider, refer to the list of Telephone Numbers provided with the notebook.
- If you forget both your user and master DriveLock passwords, the hard drive is permanently unusable.
- If you forget your DriveLock user password but know your DriveLock master password, you can remove DriveLock protection from the drive. For instructions, see "Using DriveLock" in this chapter.

Combining Compaq and Windows Passwords

Compaq security features and operating system security features work independently from each other. For example, a device disabled in Computer Setup cannot be enabled in Windows.

Similarly, you must use a Compaq password at a Compaq password prompt and a Windows password at a Windows password prompt. For example:

- If a power-on password is set, the power-on password (not a Windows password) must be entered when the notebook starts up or exits Hibernation.
- If you set Windows to prompt for a password before exiting Standby, a Windows password (not a power-on password) must be entered to exit Standby.
- A Compaq administrator password and a Windows administrator password are not interchangeable.

Any password used for a Compaq password can also be used for other Compaq passwords or as a Windows password, with these considerations:

- All Compaq passwords can be any combination of up to 32 letters, numbers, and slashes (/) and are not case sensitive.
- All Compaq passwords must be set and entered with the same keys. For example, a Compaq password set with keyboard number keys will not be recognized if it is entered with keypad number keys. (For information about the internal keypad, refer to the *Hardware Guide*, "Pointing Devices and Keyboard" chapter, on this CD.)
- When the notebook is starting up from a hard drive protected with DriveLock, you will not be prompted for a power-on password if you enter a DriveLock user or master password that is the same as the power-on password.

Using a Power-On Password

A power-on password prevents unauthorized use of the notebook. Once set, it must be entered each time the notebook is turned on, restarted, or exits Hibernation. A power-on password:

- Does not display as it is set, entered, changed, or deleted.
- Must be set and entered with the same keys. For example, a power-on password set with keyboard number keys will not be recognized if you enter it with keypad number keys.
- Can include any combination of up to 32 letters, numbers, and slashes (/) and is not case sensitive.

If you use the same term for both a power-on password and a DriveLock password, you are prompted for the DriveLock password, but not the power-on password, when the notebook starts up from the protected hard drive.

Entering Power-On Password Settings

A power-on password is set, changed, or deleted in Computer Setup.

- 1. To open Computer Setup, turn on or restart the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 2. Use the arrow keys to select the Security menu > Power-On Password, then press **enter**. Then:
 - □ To set a power-on password, type the password in the New Password field, then in the Verify New Password field, then press **F10**.

- □ To change a power-on password, type the current password in the Old Password field, type the new password in the New Password and Verify New Password fields, then press **F10**.
- □ To delete a power-on password, type the current password in the Old Password field, then press **F10**.
- 3. To save your preferences, use the arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

Entering a Power-On Password

At the power-on password prompt, type your password using the same keys you used to set the password, then press **enter**. After 3 unsuccessful attempts to enter the password, you must restart the notebook and try again.

Using a Compaq Administrator Password

A Compaq administrator password protects the configuration settings and system identification information in Computer Setup. Once set, this password must be entered to access Computer Setup. A Compaq administrator password:

- Is not interchangeable with a Windows administrator password, although both can use the same password.
- Does not display as it is set, entered, changed, or deleted.
- Must be set and entered with the same keys. For example, a Compaq Administrator password set with keyboard number keys will not be recognized if you enter it with internal keypad number keys.
- Can include any combination of up to 32 letters, numbers, and slashes (/) and is not case sensitive.

Entering Compaq Administrator Password Settings

A Compaq Administrator password is set, changed, or deleted in Computer Setup.

- 1. To open Computer Setup, turn on or restart the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 2. Use the arrow keys to select the Security menu > Setup Password, then press **enter.** Then:
 - □ To set a Compaq administrator password, type your password in the New Password and Verify New Password fields, then press **F10**.
 - □ To change a Compaq administrator password, type your current password in the Old Password field, type the new password in the New Password and Verify New Password fields, then press **F10**.
 - □ To delete a Compaq administrator password, type your current password in the Old Password field, then press **F10**.
- 3. To save your preferences and exit Computer Setup, use the arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

Entering a Compaq Administrator Password

At the Computer Setup prompt, type your password using the same keys you used to set the password, then press **enter**. After 3 unsuccessful attempts to enter the Compaq administrator password, you must restart the notebook and try again.

Using DriveLock

CAUTION: If you forget both the DriveLock user password and the DriveLock master password, the protected hard drive is permanently unusable.

DriveLock prevents unauthorized access to the contents of a hard drive. Once DriveLock protection is applied to a drive, a password must be entered to access the drive and the drive can be accessed only when it is inserted into the notebook.

DriveLock involves 2 passwords: a user password and a master password:

- A hard drive protected by DriveLock can be accessed with either the user or the master password.
- You can delete a user password or master password only by removing DriveLock protection from the drive. DriveLock protection can be removed from the drive only with the master password.
- The owner of the user password should be the day-to-day user of the protected hard drive. The owner of the master password may be a system administrator or the day-to-day user.

- A user password and a master password:
 - □ Can be the same as any other password.

If you use the same password for both a power-on password and a DriveLock password, you are prompted for the DriveLock password, but not the power-on password, when the notebook starts up from the protected hard drive.

□ Can be any combination of up to 32 letters, numbers, and slashes (/) and are not case sensitive.

Protecting a Hard Drive with DriveLock

CAUTION: If you forget both the DriveLock user password and the DriveLock master password, the protected hard drive is permanently unusable.

To access the DriveLock settings in Computer Setup, you must shut down, then turn on the notebook to access Computer Setup. If you open Computer Setup from a Windows restart, DriveLock settings are not accessible.

- 1. To verify that the notebook is off and not in Hibernation, briefly press the power button. If your work returns to the screen, shut down the notebook.
- 2. To open Computer Setup, turn on (do not restart) the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 3. Use the arrow keys to select the Security menu > DriveLock passwords, then press **enter.**
- 4. Select the location of the hard drive, then press F10.
- 5. Toggle the Protection field to Enable.

- 6. Read the warning. To continue, press F10.
- 7. Type your user password in the New Password and Verify New Password fields, then press **F10**.
- 8. Type your master password in the New Password and Verify New Password fields, then press **F10**.
- 9. To confirm DriveLock protection on the drive you have selected, type DriveLock in the confirmation field, then press **F10**.
- 10. To save your DriveLock settings, select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

Accessing a Protected Hard Drive

- 1. Ensure that the drive is in the notebook (not an optional port replicator).
- 2. When prompted for a DriveLock password, type your user or master password, using the same keys you used to set the password, then press **enter**. After 2 attempts to enter the password correctly, you must restart the notebook and try again.

Changing a DriveLock Password

CAUTION: To prevent damage to the notebook and the hard drive and loss of work, shut down the notebook before inserting or removing a primary hard drive. (The primary hard drive is any hard drive used in the hard drive bay.)

To access the DriveLock settings in Computer Setup, you must shut down the notebook, then turn it on again. If you open Computer Setup from a Windows restart, DriveLock settings are not accessible.

- 1. To verify that the notebook is off and not in Hibernation, briefly press the power button. If your work returns to the screen, shut down the notebook.
- 2. To open Computer Setup, turn on (do not restart) the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 3. Use the arrow keys to select the Security Menu > DriveLock passwords, then press **enter.**
- 4. Use the arrow keys to select the location of the hard drive, then press **F10**.
- 5. Use the arrow keys to select the field for the password you want to change, type your current password in the Old Password field, type the new password in the New Password and Verify New Password fields, then press **F10**.
- 6. To save your preferences, use arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

Removing DriveLock Protection

CAUTION: To prevent damage to the notebook and the hard drive and loss of work, shut down the notebook before inserting or removing a primary hard drive.

To access the DriveLock settings in Computer Setup, you must shut down the notebook, then turn it on again. If you open Computer Setup from a Windows restart, DriveLock settings are not accessible.

- 1. To verify that the notebook is off and not in Hibernation, briefly press the power button. If your work returns to the screen, shut down the notebook.
- 2. To open Computer Setup, turn on (do not restart) the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 3. Use the arrow keys to select the Security Menu > DriveLock passwords, then press **enter.**
- 4. Use the arrow keys to select the location of the hard drive, then press **F10**.
- 5. Toggle the Protection field to Disable, then press F10.
- 6. Type your master password in the Old Password field, then press **F10.**
- 7. To save your preference, use arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preference is set as you exit Computer Setup and is in effect when the notebook restarts.

Disabling a Device

From the Computer Setup Device Security menu, you can disable or partially disable most ports and drives. For more information about the option to disable the MultiPort **Fn+F2** hotkeys, see the *Hardware Guide*, "Pointing Devices and Keyboard" chapter, on this CD.

- 1. To open Computer Setup, turn on or restart the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 2. Select the Security menu > Device Security, then enter your preferences.
 - □ Settings for a DVD-ROM can be entered in the CD-ROM field.
 - Diskette drive settings do not apply to SuperDisk or Zip drives.
- 3. To confirm your preferences, press F10.
- 4. To save your preferences, select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

Protecting System Information

Selecting an Information Management Procedure

Follow the procedure in "Entering and Displaying System Information," which is the next section, to perform the following tasks:

- Display or enter the notebook serial number, asset tag, and ownership tag.
- Display or enter a battery pack serial number.
- Display or enter a port replicator serial number and asset tag.
- Display the processor serial number.
- Enable or disable the ability of the processor to report the processor number to software.
- Specify how the notebook is to recognize multiple, identical port replicators.

To deny access to the above information by another user, use a Compaq administrator password. For instructions, see "Using a Compaq Administrator Password" earlier in this chapter.

To display, print, or save configuration or diagnostic information about all system components, including components that are not listed above, use the Compaq Diagnostics utility. For instructions, see the section "Using Compaq Diagnostics" in Chapter 7, "Setup and Diagnostic Utilities."

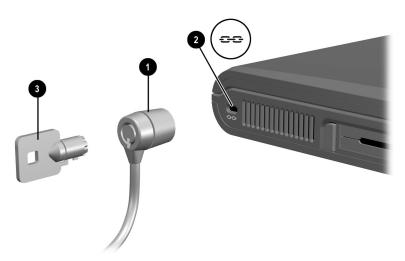
Entering and Displaying System Information

- 1. To open Computer Setup, turn on or restart the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press F2.
 - □ For navigation instructions, press **F1**.
- 2. Access or set your preference(s) by following these directions:
 - □ To view general system information, select File menu > System Information.
 - To view or enter identification values for system components, select Security menu > System IDs.
 - To enable or disable the reporting of the processor serial number by the processor to software, select Advanced menu > Device Options.
 - To specify how the notebook recognizes multiple, identical port replicators that are identically equipped, select Advanced menu > Device Options.
 - To set the notebook to recognize the port replicators as a single port replicator, select Disable.
 - To set the notebook to recognize the port replicators individually by serial number, select Enable.
- 3. To confirm the information or your preferences, press F10.
- 4. To save your information or preferences, use the arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

Connecting an Optional Cable Lock

If you have purchased a cable lock, loop the cable around a secure object, then insert the cable lock ① into the security cable slot ② and lock it with the cable lock key ③.



Connecting an optional cable lock

4

Intelligent Manageability

The Intelligent Manageability application is included only with notebooks that ship with the Windows 2000 Professional or Windows XP Professional operating system. The application is provided on the Compaq application recovery CD that ships with those operating systems.

Understanding Intelligent Manageability

Intelligent Manageability comprises software tools that can help you and/or your Network Administrator track, troubleshoot, protect, and maintain the hardware and software in your network.

Intelligent Manageability uses such tools as Insight Management Agents, Compaq Diagnostics, and Computer Setup to facilitate:

- Asset Management, which provides detailed configuration and diagnostic information.
- Fault Management, which prevents, predicts, and alerts to impending hardware problems.
- Security Management, which protects against unauthorized access to your work, system information, and components.
- Configuration Management, which provides the latest drivers, utilities, and other software. Web Agent, for example, enables you and your Network Administrator to view notebook configuration information using Web technology.

Installing Intelligent Manageability

The Intelligent Manageability application is on the Compaq application recovery CD. This CD is included with notebooks that ship with the Windows 2000 Professional or Windows XP Professional operating systems.

Instructions for installing an application from the Compaq application recovery CD are included with the CD. The instructions are provided in several, but not all, languages.

Setting Up Insight Management Agents

When the notebook is restarted after installing the Intelligent Manageability application, a Setup Management Agent icon and a Compaq Information Center icon with Intelligent Manageability links are displayed on the Desktop.

- To set up Insight Management Agents, select the Setup Compaq Management Agent icon.
- To learn more about Insight Management Agents and to access instructions for using them and other Intelligent Manageability features, select Start > Compaq Information Center > Intelligent Manageability.

Using Fault Management Alerts

Identifying a Fault Management Alert

The notebook is preset to monitor several hardware components.

If problems are found, the following alerts may display:

The hard drive alert warns up to 72 hours in advance of impending hard drive problems and can be set to initiate a software backup.

- The system temperature alert prevents critical overheating. As the system temperature rises, this feature first adjusts fan and CPU (central processing unit) speed, then displays an alert, then shuts down the system if necessary.
- The battery fault alert reports battery pack failure.
- The monitor alert reports that an error message from an optional external monitor with Intelligent Manageability features has been received. Monitors with these features include the Compaq P70 and Compaq P50 color monitors.
- The memory alert issues a report when a memory board is removed, added, or reconfigured. The report includes both the previous and current configurations.

Setting Fault Management Alert Preferences

All alerts can be displayed on the notebook screen. When the notebook is connected to a network which includes a network console, all alerts can also be reported to the network console.

Alert preferences are set in the Alert Properties window.

- To access Alert Properties, select the Intelligent Manageability icon in the taskbar.
- For Help, select the Help button in Alert Properties.

For information about setting alerts in a networked environment, select Start > Compaq Information Center > Intelligent Manageability, then search for Configuring Compaq Insight Management Agents.

5

MultiBoot (Advanced Users Only)

The Phoenix MultiBoot utility allows you to set the notebook to start up from most bootable devices.

The bootable device may be a network interface card (NIC) or a bootable drive medium. The bootable drive medium may be a diskette drive diskette, an optical drive disc, or other optional third-party disk. Optical drive discs include all varieties of CD and DVD drives.

Changing the Startup Sequence with MultiBoot

A bootable medium or NIC contains files needed by the notebook to start up and operate properly.

When more than one bootable medium or NIC is in the system, the notebook selects the startup medium or NIC by searching sequenced locations for, first, a bootable optical drive disc; second, a bootable diskette or disk; third, a bootable hard drive; and fourth, a bootable NIC.

You can change the sequence in which the notebook searches for a startup device by enabling MultiBoot and entering a new startup sequence (sometimes called a *boot order*). Or, you can use MultiBoot Express to set the notebook to prompt you for a startup location each time the notebook is started or restarted.

Some devices must be enabled in Computer Setup before they can be included in a MultiBoot sequence.

Enabling Media and Devices for MultiBoot

By default, the notebook can start only from a bootable hard drive or bootable drive medium in the notebook.

The notebook can start up from the following devices only if they have been enabled for inclusion in MultiBoot:

- NIC
- Hard drive inserted into an optional port replicator or connected by USB
- Diskette in diskette drive inserted into an optional port replicator or connected by USB
- Disk in optional, third-party disk drive inserted into an optional port replicator or connected by USB
- CD-ROM, CD-RW, or DVD in optical drive inserted into an optional port replicator or connected by USB

To enable a device for inclusion in MultiBoot:

- 1. To open Computer Setup, turn on or restart the notebook, then press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 2. Use the arrow keys to select the Advanced menu > Device Options.
 - □ To enable bootable media in USB drives or in drives inserted into a port replicator, select Enable USB legacy support.
 - □ To enable a NIC, select Internal Network adapter boot.

3. To save your preferences and exit Computer Setup, use the arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

To connect a NIC to a PXE (Preboot eXecution Environment) or RPL (Remote Program Load) server during startup without using MultiBoot (whether or not MultiBoot or USB legacy support is enabled), press **F12** when the Network Service Boot message appears very briefly in the lower right corner of the screen.

Using the Default Search Sequence

By default, MultiBoot is disabled and the notebook selects the startup medium or NIC by searching enabled locations in the sequence described in the list below.

(This list describes the order in which drive numbers are assigned. The actual startup sequence varies by configuration. For example, the notebook searches only once for a device containing a medium that can boot as drive A. If the first device it searches does not contain a medium that can boot as drive A, the notebook then searches for a device containing a medium that can boot as drive C.)

- 1. Optical drive in a port replicator connected by USB that contains a disc that boots as drive A
- 2. Optical drive in notebook that contains a disc that boots as drive A
- 3. Diskette drive in a port replicator or connected by USB
- 4. Diskette drive in notebook
- 5. Optical drive in a port replicator or connected by USB that contains a disc that boots as drive C

- 6. Optical drive in notebook that contains a disc that boots as drive C
- 7. Hard drive in notebook
- 8. Hard drive in a port replicator or connected by USB
- 9. NIC

Planning Changes to the Startup Sequence

Before changing the startup sequence, consider the following:

- When the notebook restarts after your MultiBoot changes and searches for a startup drive, it considers only the first drive of each type. For example, in the default boot order, the notebook will not start from a bootable diskette in the notebook if a non-bootable diskette is in a port replicator.
- Changing the boot order also changes the logical drive designations. For example, if you start up from a hard drive in the notebook, that hard drive becomes drive C and a hard drive in the optional port replicator becomes drive D. If you start up from a diskette drive in a port replicator, that diskette drive becomes drive A. Starting up from a NIC does not affect logical drive designations.
- The list of bootable devices in Computer Setup includes *only* the bootable devices currently in the notebook or a port replicator and any USB drives connected to the notebook or a port replicator.

Specifying MultiBoot Preferences

You can set either:

• A continuing startup sequence that the notebook uses each time it starts up.

or

A variable startup sequence, called MultiBoot Express, that sets the notebook to prompt you for a startup location each time it is started or restarted.

You set the MultiBoot Express timeout as you set up the prompt. If you do not press a key or select a startup medium within the timeout, the notebook continues startup according to the current MultiBoot sequence.

Setting a Continuing Startup Sequence

To set a startup sequence that the notebook will use each time it is started or restarted:

- 1. Restart the notebook, then press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 2. Use the arrow keys to select Advanced > Boot Options, then press **enter**.
- 3. Toggle the MultiBoot field to Enable.
- 4. Toggle the Boot Order fields to the boot sequence you prefer.
- 5. To save your preferences and exit Computer Setup, use the arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

Setting the MultiBoot Express Prompt

To set the notebook to display the MultiBoot startup location menu each time it is started or restarted:

- 1. Restart the notebook, then press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 2. Use the arrow keys to select Advanced > Boot Options, then press **enter**.
- 3. In the Express Boot Popup Delay (Sec) field, select the amount of time in seconds that you want the notebook to display the startup location menu before it defaults to the current MultiBoot setting. (When 0 is selected, the Express Boot startup location menu does not display.)
- 4. To save your preference and exit Computer Setup, use the arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preference is set as you exit Computer Setup and is in effect when the notebook restarts.

Responding to the MultiBoot Express Prompt

When the Express Boot Menu displays during startup:

- To specify a startup location from the Express Boot menu, select your preference within the timeout, then press **enter**.
- To prevent the notebook from defaulting to the current MultiBoot setting, press any key within the timeout. The notebook will not start up until you select a startup location and press **enter**.
- To allow the notebook to start up according to the current MultiBoot setting, wait for the timeout to expire.

6

Software Updates and Restorations

Updating Software

For optimal notebook performance and to make sure your notebook remains compatible with changing technologies, Compaq strongly recommends that you install the latest versions of Compaq software as they become available.

To update Compaq software:

- 1. Prepare for any update by identifying your notebook type, series or family, and, in some cases model. Prepare for a system ROM or KBC ROM update by identifying the ROM versions currently installed on the notebook.
- 2. Access the updates on your local Compaq Web site or the *Compaq Support Software CD*.
- 3. Download and install the updates.

The notebook system ROM (Read Only Memory) stores the BIOS (Basic Input Output System). The BIOS determines how the notebook hardware interacts with the operating system and external devices and also supports such notebook services as time and date. KBC (Keyboard Controller) ROM stores the parts of the BIOS that affect the keyboard.

Preparing for a Software Update

If your notebook connects to a network, Compaq recommends that you consult with your Network Administrator before installing any software updates, particularly system ROM or KBC ROM updates.

Accessing Notebook Model Information

To access the updates for your notebook, you may need to know the following information about your notebook:

- The product *category* is Notebook.
- The product *family* name and *series* number are printed on the display bezel.
- More complete *model* information is provided on the serial number label on the underside of the notebook.

Accessing ROM Version Information

To determine whether available ROM updates contain later ROM versions than those currently installed on the notebook, you will need to know the version of the system ROM or KBC ROM currently installed.

ROM version information can be displayed in either Compaq Diagnostics or Computer Setup.

Displaying ROM Information in Compaq Diagnostics

To display the currently installed ROM versions in Compaq Diagnostics:

1. If you are not certain that Compaq Diagnostics are installed on your notebook, see Chapter 7, "Setup and Diagnostic Utilities," in the section "Using Compaq Diagnostics," for information about detecting and, if necessary, loading, Compaq Diagnostics.

- 2. Access Compaq Diagnostics:
 - □ In Windows 2000 Professional, select Start > Settings > Control Panel > Compaq Diagnostics icon.
 - □ In Windows XP Home or Windows XP Professional, select Start > Control Panel > Performance and Maintenance > Compaq Diagnostics icon.
- 3. When the system scan finishes, select the System icon (on the far left of the Compaq Diagnostics toolbar).
- 4. In the lower left corner of the System screen, set the Information Level to More. The ROM information is displayed.
- 5. To close Compaq Diagnostics, select File > Exit.

Displaying ROM Information in Computer Setup

Computer Setup is a non-Windows utility. For general information about using Computer Setup, see Chapter 7, "Setup and Diagnostic Utilities."

To display ROM information in Computer Setup:

- 1. To open Computer Setup, turn on or restart the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ For navigation instructions, press **F1**.
- 2. Select the File menu > System Information. The system ROM information is displayed.
- 3. To display KBC ROM information, press **enter**, then press any key or the spacebar.
- 4. To exit Computer Setup without changing any settings, use the arrow keys to select File > Ignore Changes and Exit, then follow the instructions on the screen. After Computer Setup closes, the notebook restarts in Windows.

Accessing Software Updates

Software updates are available for some notebook families on the *Compaq Support Software CD* and for all notebooks at the Compaq Web site. For instructions for updating software from the Compaq Web site, see "Updating Software from the Internet" in this chapter.

The *Compaq Support Software CD* provides the latest Compaq software and instructions for installing and using it. The CD includes such software as device drivers, ROM updates, and utilities.

To purchase the current *Compaq Support Software CD* or a subscription that provides both the current version and future versions of the CD:

Refer to the list of telephone numbers provided with the notebook, to contact a Compaq authorized dealer, reseller, or service provider.

or

■ Visit the Compaq Web site at:

http://www.compaq.com/support/files/index.html

This page lists the notebook families for which a *Compaq Support Software CD* is available.

The obtain support in English, French, German, Dutch, or Japanese, or to obtain telephone numbers for ordering the CD in other languages, select your country from the Support Site For dialog box in the top-left corner of the page.

Updating Software from the Internet

Most software at the Compaq Web site is available in English only and packaged in a compressed file called a *SoftPaq*TM. Some ROM updates may be packaged in a compressed file called a *RomPaq*TM. Other ROM updates may be provided as a "CPQFlash" SoftPaq.

Most download packages contain a file named Readme.txt. A Readme.txt file contains detailed descriptions, installation, and troubleshooting information about the download. The Readme.txt files included with RomPaqs are in English only.

The following sections provide instructions for downloading and installing:

- System ROM update
- KBC ROM update
- SoftPaq containing an update other than a KBC ROM update

Downloading and Installing a System ROM Update

CAUTION: To prevent an unsuccessful installation, download and install the system ROM only while the notebook is connected to reliable external power using the AC Adapter. (Do not download or install a system ROM while the notebook is running on battery power, docked in an optional port replicator, or connected to an optional power source.) During the download and installation:



- Do not unplug the notebook from the electrical outlet.
- Do not shut down the notebook.
- Do not remove or insert a drive.

To download and install a system ROM:

- 1. Access the page at the Compaq Web site that provides software for your notebook.
 - □ For home and small office products, visit: http://www.compaq.com/athome/support/
 - □ For corporate products, visit:

http://www.compaq.com/support/files

- 2. In the Notebooks list, select your notebook series.
- 3. On the next page that is displayed, select your notebook from the lists. Then follow the instructions on the screen to select the Category "RomPaqs and system software."
- 4. At the download area:
 - a. Write down the number or name of any update that is later than the system ROM currently installed on the notebook.
 - b. Follow the instructions on the Web page to download the software package.
- 5. When the download is complete, open Windows Explorer.
- 6. In the left pane of the Windows Explorer window, select My Computer > your hard drive (usually, drive C) > Compaq.
- 7. In the Compaq folder, select the name or number of the software package containing the system ROM update. The system ROM installation begins.
- 8. To complete the installation, follow the instructions on the screen.

After a message on the screen reports a successful installation, you can delete the download package from the Compaq folder.

Downloading and Installing a KBC ROM Update

To update KBC ROM from the Internet, you must download the update to a diskette, then install the update from the diskette.

CAUTION: To prevent an unsuccessful installation, download and install the KBC ROM only while the notebook is connected to reliable external power using the AC Adapter. (Do not download or install a KBC ROM while the notebook is running on battery power, docked in an optional port replicator, or connected to an optional power source.) During the download and installation:

- Do not unplug the notebook from the electrical outlet.
- Do not shut down the notebook.
- Do not remove or insert a drive.

Downloading a KBC ROM Update

To download a KBC ROM update:

- 1. Insert a diskette drive or a SuperDisk drive into the notebook. For instructions, see the *Hardware Guide*, "Drives" chapter, on this CD.
- Obtain a formatted 1.44-megabyte or larger diskette. (A KBC ROM can be installed from a diskette drive diskette, but not a SuperDisk drive disk.)
- 3. Insert the diskette into the diskette drive.
- 4. Access the page at the Compaq Web site that provides software for your notebook.
 - □ For home and small office products, visit:

http://www.compaq.com/athome/support/

□ For corporate access products, visit:

http://www.compaq.com/support/files

5. In the Notebooks list, select your notebook series.

- 6. On the next page that is displayed, select your notebook from the lists. Then follow the instructions on the screen to select the Category "RomPaqs and system software."
- 7. At the download area:
 - a. Write down the number or name of any update that is later than the KBC ROM currently installed on the notebook.
 - b. Follow the instructions on the Web page to download the software package to the diskette.

Installing a KBC ROM Update

To install a KBC ROM update from a diskette:

- 1. Shut down the notebook.
- 2. Ensure the notebook is connected to reliable external power through the AC Adapter.
- 3. Insert the diskette containing the KBC ROM update into the diskette drive or SuperDisk drive.
- 4. Turn on the notebook, then follow the instructions on the screen.
- 5. When a message on the screen reports that the installation is complete, remove the diskette.
- 6. Shut down the notebook. (Do not restart the notebook.)

When you start up the notebook after installing a KBC ROM update, you can delete the download package from the Compaq folder.

Downloading and Installing a Non-ROM SoftPaq

To update software other than system ROM or KBC ROM:

- 1. Access the page at the Compaq Web site that provides software for your notebook.
 - □ For home and small office products, visit: http://www.compaq.com/athome/support/
 - □ For corporate access products, visit: http://www.compaq.com/support/files
- 2. In the Notebook column, select your notebook series.
- 3. On the next page that is displayed, select your notebook from the lists. Then follow the instructions on the screen to select a software package that does not contain a ROM.
- 4. At the download area:
 - a. Write down the number or name of the software package.
 - b. Follow the instructions on the Web page to download the software package.
- 5. When the download is complete, open Windows Explorer.
- 6. In the left pane of the Windows Explorer window, select My Computer > your hard drive (usually, drive C) > Compaq.
- 7. In the Compaq folder, select the name or number of the software package containing the system ROM update.
- 8. Select the file that includes a .exe extension, for example, Filename.exe. The installation begins.
- 9. To complete the installation, follow the instructions on the screen.

After a message on the screen reports a successful installation, you can delete the download package from the Compaq folder.

Restoring Software

The Restore CDs included with the notebook contain all the software that shipped preinstalled or preloaded on the notebook and instructions for restoring it.

You can use the Restore CDs to install or reinstall individual software items, such as applications, or to restore the notebook factory image.

The notebook factory image is the notebook software as it was when the notebook was shipped. When you restore to the factory image:

- All settings are as they were set at the factory when the notebook was shipped.
- All software is the version installed at the factory.
- All software not included in the factory-supplied image, including drivers, applications, and utilities that you personally installed, will have to be reinstalled.

If the notebook has become unresponsive, you may be able to start the notebook from a bootable Restore CD. For information about starting the notebook from a bootable Restore CD, see the documentation included with the Restore CDs.

CAUTION: To prevent an unsuccessful restoration, use a Restore CD only while the notebook is connected to reliable external power using the AC Adapter. (Do not use a Restore CD while the notebook is running on battery power, docked in an optional port replicator, or connected to an optional power source.) During a restoration or installation:

- Do not unplug the notebook from the electrical outlet.
- Do not shut down the notebook.
- Do not remove or insert a drive.

Installing a Retail Version of an Operating System

A Windows operating system provided on the notebook or on a Restore CD is enhanced by Compaq. The Compaq enhancements add power and security features and provide supplementary support for external devices such as drives and PC Cards.



CAUTION: Replacing an operating system enhanced by Compaq with a retail version of an operating system will result in the loss of all Compaq enhancements. In some cases, the loss of these enhancements may result in an unresponsive system and the loss of unsaved work. In other cases, complete USB support may become unavailable.

7

Setup and Diagnostic Utilities

Selecting Computer Setup or Compaq Diagnostics

The notebook features two Compaq system management utilities:

- Computer Setup is a system information and customization utility that can be used even when the operating system is not working or will not load. This utility includes settings that are not available in Windows. When you exit Computer Setup, the operating system restarts.
- Compaq Diagnostics is a system information and diagnostic utility that is used within your Windows operating system. Use this utility to:
 - Compare the notebook configuration at the time Compaq Diagnostics was installed to interim or current configurations.
 - Display and print system information.
 - □ Test system components.
 - Troubleshoot a device configuration problem.

Using Computer Setup

Computer Setup is a preinstalled ROM-based utility which can be used even when the operating system is not working or will not load. If the operating system is working, the notebook will restart the operating system after you exit Computer Setup.

Because Computer Setup is not Windows-based, it does not support the pointing devices on your notebook. Instead, you point and select with the keys on your notebook keyboard.



An external keyboard connected by USB can be used in Computer Setup only if USB legacy support is enabled. For more information about USB, see the *Hardware Guide*, "External Device Connections" chapter, on this CD.

Instructions for using keys to set preferences in Computer Setup are included in the step-by-step Computer Setup procedures provided throughout your notebook guides. These procedures can be used by all users.

The menu tables later in this section provide an overview of Computer Setup options that may be helpful to advanced users who prefer to select preferences without following step-by-step procedures.

Computer Setup Procedures

The information and settings in Computer Setup are accessed from the File, Security, Tools, and Advanced menus:

- 1. To open Computer Setup, turn on or restart the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ To view navigation information, press **F1**.
 - □ To return to the Computer Setup menu, press esc.

- 2. Select the File, Security, Tools, or Advanced menu.
- 3. To exit Computer Setup:
 - □ To exit without saving any of the settings you may have entered, use the arrow keys to select File > Ignore Changes and Exit, then follow the instructions on the screen.
 - □ To exit and save all the settings you have entered, use the arrow keys to select File > Save Changes and Exit, then follow the instructions on the screen.

Your preferences are set as you exit Computer Setup and are in effect when the notebook restarts.

Restoring Computer Setup Defaults

To return all settings in Computer Setup to the values set at the factory:

- 1. To open Computer Setup, turn on or restart the notebook. Press **F10** while the F10 = ROM Based Setup message is displayed in the lower left of the screen.
 - □ To change the language, press **F2**.
 - □ To view navigation information, press **F1**.
- 2. Use the arrow keys to select File > Restore defaults.
- 3. Select the Restore Defaults check box.
- 4. To confirm the restoration, press F10.
- 5. Select File > Save Changes and Exit, then follow the instructions on the screen.

When the computer restarts, the factory settings are in effect, but any identification information you may have entered is intact.

Selecting from the File Menu

Select	To Do This		
System information	View identification information about the notebook, a port replicator, and the battery pack in the system.		
	 View specification information about the processor, memory and cache size, and system ROM. 		
Save to floppy	Save system configuration settings to a diskette.		
Restore from floppy	Restore system configuration settings from a diskette.		
Restore defaults	Replace configuration settings in Computer Setup with factory default settings. (Identification information is retained.)		
Ignore changes and exit	Cancel changes entered during the current session, then exit and restart the notebook.		
Save changes and exit	Save changes entered during the current session, then exit and restart the notebook. The changes you save are in effect when the notebook restarts.		

Selecting from the Security Menu

Administrator password Power-on password	Enter, change, or delete a Compaq administrator password.		
Power-on password			
	Enter, change, or delete a power-on password.		
DriveLock passwords	Enable/disable DriveLock; change a DriveLock User or Master password.		
	DriveLock Settings are accessible only when you enter Computer Setup by turning on (not restarting) the notebook.		
Device security	Enable/disable		
	Ports or diskette drives*		
	 CD-ROM or diskette startup[†] 		
	Diskette write*		
	MultiPort Fn+F2 hotkeys		
System IDs	Enter user-defined identification values.		

[†]Settings for a DVD-ROM or DVD/CD-RW can be entered in the CD-ROM field.

Selecting from the Tools Menu

Select	To Do This	
HDD Self Test Options	Run a quick or comprehensive self test on any hard drive in the system.	

Selecting from the Advanced Menu

Select	To Do This	
Language (or press F2)	Change the Computer Setup language.	
Boot Options	Enable/disable:	
	 QuickBoot, which starts the notebook more quickly by eliminating some startup tests. (If you suspect a memory failure and want to test memory automatically during startup, disable QuickBoot.) 	
	MultiBoot, which sets a startup sequence that can include most bootable devices and media in the system. For instructions, see Chapter 5, "MultiBoot (Advanced Users Only)."	
Device Options	 Enable/disable Num lock mode at startup. Enable/disable multiple standard pointing devices at startup. (To set the notebook to support only a single, usually nonstandard, pointing device at startup, select Disable.) 	
	 Select a parallel port mode: EPP (Enhanced Parallel Port), standard, bidirectional, or ECP (Enhanced Capabilities Port). 	
	continued	

Select	То	Do This
Device Options (continued)		Enable/disable USB legacy support for a USB keyboard, mouse, and hubs. When USB legacy support is enabled:
		 A USB keyboard, mouse, and hubs work even when a Windows operating system is not loaded.
		The notebook can start from a bootable hard drive, diskette drive diskette, SuperDisk drive disk, or CD-ROM, CD-RW, or DVD inserted into a drive connected by USB to the notebook or an optional port replicator.
	•	Enable/disable all settings in the SpeedStep window. (When Disable is selected, the notebook runs in Battery Optimized mode.)
	•	Specify how the notebook recognizes multiple identical port replicators that are identically equipped. (Select Disable to recognize the port replicators as a single port replicator; select Enable to recognize the port replicators individually, by serial number.)
	•	Enable/disable the reporting of the processor serial number by the processor to the software.
	•	Enable/disable inclusion of an internal peripheral interconnect (PCI) Network Interface Card (NIC) in MultiBoot.

Selecting from the Advanced Menu, continued

Using Compaq Diagnostics

The Compaq Diagnostics utility includes 2 system scans:

- Compaq Configuration Record compares the notebook configuration at the time Compaq Diagnostics was installed to interim or current configurations.
- Compaq Diagnostics provides more complete information about your current configuration as well as options for testing components.

Both Compaq Diagnostics scans are designed to report on Compaq components. If non-Compaq components are scanned, the results may be inconclusive.

Detecting Compaq Diagnostics

The notebook ships with the Compaq Diagnostics utility preloaded, but not preinstalled. You may have installed it earlier, along with other utilities, or it may have been installed by another user.

To determine whether Compaq Diagnostics is installed:

- 1. Access the location of the Compaq Diagnostics icons:
 - □ In Windows 2000 Professional, select Start > Settings > Control Panel.
 - □ In Windows XP Home or Windows XP Professional, select Start > Control Panel > Performance and Maintenance.
- 2. Look through the displayed icons.
 - If icons for Compaq Configuration Record and Compaq Diagnostics are included, the Compaq Diagnostic utility is installed.
 - If icons for Compaq Configuration Record and Compaq Diagnostics are not included, the Compaq Diagnostic utility is loaded, but not installed.

Installing Compaq Diagnostics

To install the Compaq Diagnostics utility:

■ In Windows XP Professional, select Start > Setup Compaq Software icon. Select Compaq Diagnostics > Next button, then follow the instructions on the screen.

■ In Windows 2000 Professional and Windows XP Home:

- □ If the Setup Compaq Software icon is on the Desktop, select the icon > Compaq Diagnostics > Next button, then follow the instructions on the screen.
- □ If the Setup Compaq Software icon is not on the Desktop, select Start > Run.
 - In Windows 2000 Professional, on the command line, type:

c:\cpqapps\setup.exe preload /s

The Setup Compaq Software icon is displayed on the Desktop.

• In Windows XP Home, on the command line, type:

c:\cpqapps\setup.exe preload programs /s

The Setup Compaq Software icon is displayed in the All Programs menu. To access the Setup icon, select Start > All Programs.

Using the Compaq Configuration Record Scan

The Compaq Configuration Record scan compares the notebook configuration at the time the Compaq Diagnostics utility was installed to interim or current configurations.

- 1. To run the Compaq Configuration Record scan and open the Compaq Configuration Record window:
 - □ In Windows 2000 Professional, select Start > Settings > Control Panel, then select Compaq Configuration Record.
 - □ In Windows XP Home or Windows XP Professional, select Start > Control Panel > Performance and Maintenance, then select Compaq Configuration Record.

When the scan displayed on the progress bar is complete, a window displays your configuration at the time Compaq Diagnostics was installed and your current configuration.

- 2. To save the displayed information or view additional information, such as interim configurations, select the Help button on the menu bar, then follow the instructions on the screen. The icon on the Help button is a question mark.
- 3. To exit the Compaq Configuration Record scan, select File > Exit.

Using the Diagnostics Scan

When you run the Compaq Diagnostics scan, a scan of all system components is displayed on the screen before the Compaq Diagnostics window opens.

You can display more or less information from anywhere within Compaq Diagnostics by selecting Level on the menu bar.

Obtaining Configuration Information

- 1. To run the Compaq Diagnostics scan and open the Compaq Diagnostics window:
 - □ In Windows 2000 Professional, select Start > Settings > Control Panel, then select Compaq Diagnostics.
 - □ In Windows XP Home or Windows XP Professional, select Start > Control Panel > Performance and Maintenance > Compaq Diagnostics.
- 2. Select Categories, then select a category from the drop-down list. The information is displayed.
 - $\Box \quad \text{To save the information, select File > Save As.}$
 - \Box To print the information, select File > Print.
- 3. To close Compaq Diagnostics, select File > Exit.

Obtaining Diagnostic Test Information

- 1. To run the Compaq Diagnostics scan and open the Compaq Diagnostics window:
 - □ In Windows 2000 Professional, select Start > Settings > Control Panel, then select Compaq Diagnostics.
 - □ In Windows XP Home or Windows XP Professional, select Start > Control Panel > Performance and Maintenance > Compaq Diagnostics.
- 2. Select the Test tab.
- 3. In the scroll box, select the category or device you want to test.
- 4. Select a test type:
 - Quick Test runs a quick, general test on each device in a selected category.
 - □ Complete Test performs maximum testing on each device in a selected category.

- □ Custom Test performs maximum testing on a selected device.
 - To run all tests for your selected device, select the Check All button.
 - To run only the tests you select, select the Uncheck All button, then select the check box for each test you want to run.
- 5. Select a test mode:
 - □ Interactive Mode provides maximum control over the testing process. You determine whether the test was passed or failed. You may be prompted to insert or remove devices.
 - □ Unattended Mode does not display prompts. If errors are found, they are displayed when testing is complete.
- 6. Select the Begin Testing button.
- 7. To view a test report after a test has run, select a tab:
 - □ The Status tab summarizes the tests run, passed, and failed during the current testing session.
 - □ The Log tab lists tests run on the system, the number of times each test has run, the number of errors found on each test, and the total run time of each test.
 - □ The Error tab lists all errors found on the notebook with their error codes.
- 8. To save a test report:
 - □ Select the Log tab Save button to save a Log tab report.
 - □ Select the Error tab Save button to save an Error tab report.
- 9. To print a test report:
 - □ If the report is on the Log tab, select File > Save As, then print the file from your folder.
 - □ If the report is on the Error tab, select the Error tab Print button.

Index

A

AC Adapter 2-1 administrator password, Compaq. See Compaq administrator password administrator password, Windows 3 - 3Aircraft Adapter (optional) 2-1 applications. See software asset tag 3-13 audio CD. See CD Automobile Power Adapter/Charger (optional) 2–1 autorun, autoplay, auto insert notification cancelling while inserting audio CD 1-2 enabling 1-14 responding to prompt 1-14 setting preferences for 1-1 settings required by DirectCD 1 - 14

В

battery pack when to remove 2–3 battery packs calibration of 2–1 causing buffer underrun errors 1–21 causing CD or DVD write corruption 1–15 supplementary information 2–16 when to use 2–1 *See also* Hibernation; power; Standby BIOS (Basic Input Output System) 6–1 boot order. *See* MultiBoot buffer underrun errors 1–21

С

cable lock (optional) 3-15 calibration, battery 2-1 CD accessing Windows Media Player help files 1–7 avoiding Standby and Hibernation while playing 1 - 1cancelling autorun while inserting 1-2 Compag Support Software CD 6 - 4copying 1–12 creating 1–12 disabling drive for 3-12 displaying contents of 1-1 Easy CD Creator Basic CD 1 - 13

hotkey commands 1-6 playing audio 1-4 playing video 1-5 Restore CDs 6-10 selecting 1–16 software, Easy CD Creator 1 - 13software, Windows Media Player 1-4 troubleshooting 1–20 types 1-16 writing to a 1-15 CD Copier 1-20 Central Processing Unit. See CPU (Central Processing Unit) Compag administrator password changing 3-6 combining with other passwords 3–3 deleting 3-6 entering 3-7 features 3-5 forgetting 3-2 setting 3-6 **Compaq Configuration Record** described 7-8 procedures 7-10 See also Compaq Diagnostics **Compag Diagnostics** described 7-8 detecting 7–8 displaying configuration information with 7-10 displaying ROM information with 6–2 icons 7-8

installing 7-9 scans described 7-8 vs. Computer Setup 7-1 when to use 7-1Compag Support Software CD 6-4 Compaq telephone numbers for ordering Compaq Support Software CD 6-4 Worldwide Telephone Numbers booklet 3–2 Compaq Web site ordering Compaq Support Software CD from 6-4 updating software from 6-1 Computer Setup Advanced menu 7-6 changing language of 7–2 described 7-1 displaying ROM information with 6–3 enabling/disabling devices with 3 - 12entering/displaying system information with 3-14 File menu 7-4 navigation in 7-2procedures 7-2 protecting with password 3-5 restoring defaults 7-3 Security menu 7-5 setting Compaq administrator password preferences in 3-5 setting DriveLock preferences in 3–7 setting MultiBoot preferences in 5-1

setting power-on password preferences in 3-4 setting SpeedStep preferences in 2–15 Tools menu 7-6 USB legacy support 7–2 vs. Compaq Diagnostics 7-1 when to use 7-1 configuration information, displaying 7–11 conserving power. See power conservation CPQFlash file 6-5 CPU (Central Processing Unit) displaying information about, in Compaq Configuration Record 7-10 displaying information about, in Computer Setup 3-13 Intelligent Manageability protection for 4-3 securing 3-13 serial number 3-13 setting speed of 2–13 testing 7-10

D

device enabling/disabling 3–12 diagnostics utility. *See* Compaq Diagnostics Digital Audio Easy Access button 1–6 DirectCD 1–16, 1–19 disc, optical. *See* CD; DVD disk, diskette

avoiding Standby and Hibernation while using 2-4 disabling drive for 3-12 displaying contents of 1–1 downloading KBC ROM to 6-7 Disk-at-once, disabling 1–18 display switch changing function of 2-9 default function 2-6 identified 2-5 display, turning off 2–6 drive designations changing 5-4 displaying 1-3 DriveLock accessing a DriveLock-protected hard drive 3-9 features 3-7 passwords, combining with other passwords 3-3 passwords, forgetting 3–2 passwords, master and user described 3-7 protecting hard drive with 3-7 drives See CD; disk, diskette; DVD; hard drive, protecting with DriveLock DVD accessing WinDVD help files 1 - 9avoiding Standby and Hibernation while playing 1 - 1copying 1–12

creating 1–12 disabling drive for 3-12 displaying contents of 1-1 docking and undocking while playing 1–10 formats 1-16 playing 1–8 region settings 1-10 to 1-11 selecting 1-16 software, Easy CD Creator 1 - 13software, WinDVD 1-8 starting 1-10 troubleshooting 1-20 types 1-16 writing to a 1–15

Ε

Easy CD Creator accessing Help file 1-19 CD Copier, when to use 1-12 DirectCD, when to use 1-12Easy CD Creator Basic CD 1 - 13features 1-12 formats 1-16 installing 1-13 obtaining 1-12 preparing to use 1–15 prompt, auto insert notification 1 - 14prompt, UDF 1–16 settings 1–17, 1–20 source drive vs. destination drive 1-15 troubleshooting 1-20

error message "Playback of Content From this Region..." 1–10 Compaq Diagnostics error tab 7–12 errors buffer underrun 1–21

F

family, identifying notebook 6–2 Fault Management alerts 4–2 floppy disk. *See* disk, diskette

Η

Hibernation avoiding while using drive media 1-1 avoiding while using infrared 2-4choosing to initiate 2-3default procedures 2-8 described 2-2 enabling/disabling 2–2 exiting 2-8 initiating 2-8 setting preferences 2–9 when to use 2-2hotkey commands 1-6 hotkeys disabling MultiPort 3-12 entering audio CD commands with 1-6 initiating Standby with 2–7

I

infrared disabling 3–12 using Standby with 2–4 Intelligent Manageability fault management alerts 4–2 features 4–1 installing 4–2 setting up Agents 4–2 InterVideo WinDVD. *See* WinDVD

K

KBC ROM (Keyboard Controller Read Only Memory) defined 6–1 determining current version of 6–2 downloading 6–7 installing 6–8 obtaining updates for 6–4 update procedure 6–7 keyboard, external (optional) 7–2 keys, media 1–6

L

language, changing in Computer Setup 3–12 locked system emergency shut down procedures 2–10 reinstalling software 6–10 logical drive designations. *See* drive designations

Μ

media accessing 2–4 choosing 1–16 formatting 1–16 media keys 1–6 model, identifying notebook 6–2 modes, SpeedStep 2–13 monitor, external (optional), alert 4–3 MultiBoot default startup sequence 5–3 devices supported by 5–1 enabling devices for 5–2 Express 5–5 function 5–1 setting preferences 5–4

Ν

network connecting to PXE or RPL server at startup 5–3 drive, copying to or from 1–15 enabling internal NIC for MultiBoot 5–3 network drive using during a copy procedure 1–15 Network Service Boot 5–3 notebook model, family, type 6–2 notebook serial number 3–14

0

operating system installing retail version of 6–11 reinstalling 6–10 optical disc. *See* CD; DVD

Ρ

passwords combining 3–3 Compaq vs. Windows 2–9 forgetting 3–2

See also Compaq administrator password; DriveLock; power-on password PCFriendly 1-8 Phoenix MultiBoot. See MultiBoot port replicator (optional) as power source 2-1 docking or undocking before starting DVD 1-10 recognition settings 3–13 using during a copy procedure 1 - 15power button, default functions 2–6 button, identified 2-5 button, setting preferences for 2 - 9controls, identified 2–5 controls, using 2-6 icon 2-11 interruption 2-3 procedure settings 2–9 setting preferences 2–9, 2–11 sources 2-1 SpeedStep (Windows 2000 Professional) 2–13 power conservation Hibernation 2–2 settings 2–9, 2–11 SpeedStep 2–13 Standby 2–2 Power Options window accessing 2-11 power scheme (Windows) changing 2-12 setting 2-12

power/standby light 2–5 power-on password changing 3–4 combining with other passwords 3–3 deleting 3–4 entering 3–5 features 3–4 forgetting 3–2 setting 3–4 processor. *See* CPU (Central Processing Unit) PXE (Preboot eXecution Environment) protocol 5–3

R

recording media choosing 1-16 formatting 1-16 region settings for DVD 1–10 to 1 - 11reset procedures (emergency shut down procedures) 2-10 resetting the notebook 3–2 Restore CDs installing Intelligent Manageability 4–2 restoring software 6-10 ROM. See system ROM (Read Only Memory) RomPaq defined 6-5 downloading and installing 6-5 RPL (Remote Program Load) protocol 5-3

S

scans, system 7–8 security cable slot 3-15 security features cable lock (optional) 3-15 Compag administrator password 3-5 device disabling 3–12 passwords, combining Compaq and Windows passwords 3-3 passwords, forgetting 3-2 power-on password 3-4 protecting identification information 3-13 Ouick Reference to 3-1 serial number 3-13 CPU (Central Processing Unit) 3 - 13notebook 3-13 series, identifying notebook 6–2 Setup Compaq Software icon, displaying 1–8 shut down 2-3 shutting down the notebook emergency procedures 2-10 Windows procedures 2–6 sleep button (Windows) 2–9 SoftPag defined 6-5 downloading and installing 6-8 software **Compaq Configuration Record** 7 - 8Compag Diagnostics 7–1, 7–8 Computer Setup 7–1, 7–2 Easy CD Creator 1-12

Intelligent Manageability 4-1 InterVideo WinDVD 1-8 MultiBoot 5-1 MultiBoot Express 5–5 operating system, installing retail version of 6-11 PCFriendly 1-8 reinstalling 6-10 restoring 6-10 SpeedStep (Windows 2000 Professional) 2-13 UDF Reader 1-16 Windows Media Player 1-4, 1 - 21software updates accessing 6-4 Compag Support Software CD 6-4 CPQFlash file 6–5 determining current version of KBC ROM 6-2 determining current version of system ROM 6-2 determining notebook model, family, type 6-2identifying software packages 6-5 RomPag 6–5 SoftPaq 6–5 summary of procedures 6–1 updating KBC ROM from Internet 6–5 updating system ROM from Internet 6-5 SpeedStep (Windows 2000 Professional) 2-13 to 2-16

Standby avoiding while using drive media 1-1 avoiding while using infrared 2-4choosing to initiate 2-3 described 2-2 exiting 2-7 initiating 2-7 setting preferences 2–9 when to use 2-2system information 3-14 system lock-up 2-10 emergency shut down procedures 2-10 reinstalling software 6-10 system ROM (Read Only Memory) defined 6-1 determining current version of 6 - 2downloading and installing 6–5 obtaining updates for 6-4

Т

telephone numbers for ordering *Compaq Support Software CD* 6–4 *Worldwide Telephone Numbers* booklet 3–2 Track-at-once enabling 1–18 turning off the notebook emergency shut down procedures 2–10 Windows shut down procedures 2–6 turning on the notebook 2–6

U

UDF Reader 1–16, 1–20 unresponsive system 2–10 emergency shut down procedures 2–10 reinstalling software 6–10 USB legacy support 7–2 utilities. *See* software

V

video CD. See CD

W

Windows Media Player accessing Help file 1–7 playing a video CD 1-5 playing an audio CD 1-4 using hotkey commands with 1 - 5using with Easy CD Creator 1 - 21Windows passwords 3-3 WinDVD accessing Help file 1–9 error message 1–10 function 1-8 installing 1–8 playing DVD with 1–10 procedures 1-10 region settings 1-10 Worldwide Telephone Numbers booklet 3-2